6.2.7 Characteristics of New and Stock Generating Capacities, by Plant Type

New Plant Type	Heatrate (1) in 2009 (Btu/kWh)	Size (MW)	Overnight Costs (2) (2008 $/kW)	Total Capital Costs of Typical New Plant ($2008 million)
Scrubbed Coal	9,200	600	2223	1334
Integrated Coal-Gasification Combined Cycle (IGCC)	8,765	550	2569	1413
IGCC w/Carbon Sequestration	10,781	380	3776	1435
Conv. Gas/Oil Combined Cycle	7,196	250	984	246
Adv. Gas/Oil Combined Cycle	6,752	400	968	387
Conv. Combustion Turbine	10,788	160	685	110
Adv. Combustion Turbine	9,289	230	948	218
Fuel Cell	7,930	10	5478	55
Advanced Nuclear	10,488	1350	3820	5157
Municipal Solid Waste	13,648	30	2599	78
Conventional Hydropower (3)	9,884	500	2291	1146
Wind	9,884	50	1966	98

Stock Plant Type	2008	2010	2015	2020	2025	2030
Fossil Fuel Steam Heat Rate (Btu/kWh)	9,893	9,872	9,619	9,653	9,706	9,609
Nuclear Energy Heat Rate (Btu/kWh)	10,453	10,453	10,453	10,453	10,453	10,453

Note(s): 1) Plant use of electricity is included in heat rate calculations; however, transmission and distribution losses of the electric grid are excluded. 2) Overnight costs represent the capital costs of new projects initiated in 2009. Includes contingency factors and exlcudes interest charges. 3) Hydro costs and performance characteristics are site-specific. This table provides the cost of the least expensive plant that could be built in the Northwest Power Pool region, where most proposed sites are located.

Source(s): EIA, Assumptions to the AEO 2010, Apr. 2010, Table 8.2. p. 91 for 2009 plant characteristics; EIA, Annual Energy Outlook 2008, Mar. 2008, Table A2, p. 117-119, and Table A8, p. 131-132 for estimated stock plant heat rates.